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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/631,279

07/31/2003

Keith A. Raniere

FIRS-2992

3766

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7590

12/14/2006

SCHMEISER, OLSEN & WATTS
22 CENTURY HILL DRIVE
SUITE 302
LATHAM, NY 12110

EXAMINER

UTAMA, ROBERT J

ART UNIT

PAPER NUMBER

3714

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,279

Applicant(s)

RANIERE, KEITH A.

Examiner

Robert J. Utama

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-33 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-8 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:01/11/2006,06/13/2006.

Detailed Action

1. In response to the amendment filed on 06/21/2006, claims 1 and 4-33 are pending, claims 9-16 and 21-33 are withdrawn. Claims 2-3 have been cancelled.

Election/Restrictions

2. Applicant's election of Group I of claims 1-8 and 17-20 in the reply filed on 06/21/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

3. Claim 9-16 and 21-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group II and III, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/21/2006.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. **Claims 1 and 4-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.**

The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 is directed toward "*determining if a subject is trainable with respect to the performance of a given activity*". The limitation of "determining" implies that a finite step-by-step procedure needs to be established in order to reach a determination or a decision. The specification fails to provide distinct criteria that need to be assessed in order to arrive at such decision.

Claims 4-8 are also rejected under 35 U.S.C. 112 first paragraph since these claims is dependent upon claim 1.

6. Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 8 is directed toward training with respect to inanimate objects of computer program and data. The specification recites that this step in enabled for an adaptive computer program by finding a "resonance point" of the system. The specification fails to provide how the determination of such "resonance point" can be reached.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 18 recites "wherein the at least *one parameter* is a physical parameter", this "*one parameter*" may be interpreted as the subject's parameter or the parameter of performance systems. For the purpose of the search and examination of this office action, the examiner presumes "*one parameter*" in this case to be directed toward the subject and not directed toward the performance system.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 1, 4-8 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hervert PED 219 Chapter 14 Notes (hereinafter Hervert) and in view of Stubbs et al US 6,736,759 (hereinafter Stubbs '759).

12. With respect to independent claim 1, of the limitation of “*training a subject near or at a point of efficiency until exhaustion occur*”, Hervert gives a teaching to a training method where the trainee is trained with respect to his/her blood lactate level (point of efficiency) until the exhaustion sets in (Hervert page 2 right before the heading AEROBIC TRAINING). Hervert fail to give teaching with respect to: “*determine whether a subject is trainable with respect to a given activity*” and “*determining a point of efficiency of said subject with respect to at least one parameter*”. Stubbs ‘759 system enables a user to monitor their *lactate threshold (LT)* during a physical exercise session (Stubbs ‘759 Col 27:4-20). *Lactate threshold* is defined as an indication when body is unable to prevent the formation of lactic acid in the muscle, which an indication where working muscle begins to fail and a subject need to stop exercising (Stubbs ‘759 Col 25:45-49). Hence, the subject is no longer trainable. Stubbs ‘759 teaches a method of stress testing to determine a point of efficiency (*lactate threshold*) of an individual (Stubbs Col 26:48-65). Therefore, it would have been obvious at the time of the invention to combine the training method disclosed by Hervert with the training apparatus of Stubbs ‘759. One of ordinary skilled in the art would have been motivated to make this combination since it would enable a user practicing the training method disclosed by Hervert to know exactly when his/her body is exhausted as explained by the teaching of Stubbs ‘759 (Stubbs ‘759 Col 27:4-20 and Stubbs ‘759 Col 4:1-8).

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13. With respect to dependent claim 4, where one of the parameter is at least of a physical parameter. Hervert discloses that the subject is trained with respect to his/her physical parameter of blood lactate levels.

14. With respect to dependent claim 5, where the at least one physical parameter selected is a chemical activity profile. Hervert discloses that the subject is trained with respect to his/her chemical activity profile in the form of the blood lactate levels.

15. With respect to dependent claim 6, where the at least one physical parameter is the metabolic rate. Hervert discloses that the subject is trained with respect to his/her metabolic rate in the form of the blood lactate levels.

16. With respect to dependent claim 7, where at least one parameter is observed by signal selected from a group of verbal utterance or physical motions. Hervert fails to give a teaching of where one of the parameter observed by a signal selected from physical motions. Stubbs '759 teaches of a system where the subject's velocity, pace and heading (physical motion or movement) are observed through the use of a GPS device (Stubbs '759 Col. 9:16-30). Therefore, it would have been obvious at the time of the invention to combine the training method disclosed by Hervert with the training apparatus of Stubbs '759. One of ordinary skilled in the art would have been motivated to make this combination since it would enable a user to monitor, control and/or analyze their performance while exercising at any location (e.g., outside of a laboratory) (Stubbs '759 Col.7:1-5).

17. With respect to dependent claim 8, where the subject is selected from a human. Hervert's disclosure is directed to the realm of physical education in order to discuss *"normal human physiological function and how it is altered and restored in response to exercise and training"*.

18. With respect to independent claim 17, of the limitation of *"training a subject near or at a point of efficiency so the duration the subject can maintain the point of efficiency changes"*. Hervert gives a teaching to a training method where the trainee is trained with respect to the blood lactate level (point of efficiency) until the exhaustion sets in (one have reach his/her lactate threshold). This method of training, where a training session is consisted of a mixture of high (burst of intense running) and low (sled drills) cardiovascular exercises, also known as interval training are known to have the goal of increasing aerobic capacity so that a user can work harder and longer during for a given exercise (Hervert last sentence of page 6). Hervert fails to provide teaching to: *"providing a performance system"*, *"activating the performance system"*, *"recording at least one parameter of the system"*, *"measuring at least one parameter of a subject"*, and *"determining at least one point of efficiency parameter by changing the at least one parameter of the performance system until the at least one parameter of the subject substantially changes beyond a given tolerance point"*. Stubbs '759 gives a teaching of providing a performance system and activating the performance system. Stubbs '759 performance system and its activation can be clearly seen in Stubbs '759 FIG. 15, FIG.9,

FIG. 13 and FIG. 14. Stubbs '759 also records the parameter of the performance system by recording the blood oxygen level as a parameter during the exercise period (Stubbs '759 Col 5:65-67). The subject parameters (velocity, pace, oxygen level and workload are measured using an GPS device, heart-meter and an oximeter (Stubbs '759 Col 5:40-45 and Stubbs '759 Col 3:10-13). Stubbs '759 teaches a method to determine point of efficiency (*lactate threshold*) of an individual by increasing the parameter of the performance system (velocity) until one parameter of the subject changes beyond a given tolerance function (exhaustion) (Stubbs Col 26:48-65). Therefore, it would have been obvious at the time of the invention to combine the training method disclosed by Hervert with the training apparatus of Stubbs '759. One of ordinary skilled in the art would have been motivated to make this combination since it would enable a user practicing the training method disclosed by Hervert to know exactly when his/her body is exhausted as explained by the teaching of Stubbs '759 (Stubbs '759 Col 27:4-20 and Stubbs '759 Col 4:1-8).

19. With respect of dependent claim 18, where at least one parameter is a physical parameter. Hervert discloses that the subject is trained with respect to his/her physical parameter of blood lactate levels.

20. With respect of dependent claim 19, where one of the physical parameter selected is the chemical activity profile. Hervert discloses that the subject is

trained with respect to his/her chemical activity profile in the form of the blood lactate levels.

21. With respect to dependent claim 20, where one of the physical parameter selected is the metabolic rate. Hervert discloses that the subject is trained with respect to his/her metabolic rate in the form of the blood lactate levels.

Response to Arguments

22. Applicant's submission of the Information Disclosure Citation (IDS) on January 11th, 2006 and June 13th, 2006 have been accepted and considered by the examiner.

23. Applicant's request to withdraw the examiner previous 101 rejections on claim 1-8 and 17-20 had been persuasive. Hence, the previous rejection under 35 U.S.C 101 has been withdrawn.

24. Applicant's arguments with respect to claim 1,4-8 and 17-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Stevens, Kathy.

Interval training goals and result

- Exercise Safety.

Regular exercise safety practice

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Utama whose telephone number is (571) 272-1676. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (571)272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RU
Robert Utama / November 27th, 2006


KATHLEEN MOSSER
PRIMARY EXAMINER